



AMENDMENT UNDER 37 C.F.R. §1.116
EXPEDITED PROCEDURE
GROUP ART UNIT 1511

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

EGASHIRA et al

Application No: 07/521,618

Group Art Unit: 1511

Filed: May 10, 1990

Examiner: Lee, Y.

For: SOLID GOLF BALL

#12/8m
04.22.92
[Signature]

AMENDMENT UNDER 37 C.F.R. §1.116

ATTN: BOX AF
Honorable Commissioner of
Patents and Trademarks
Washington, D.C. 20231

RECEIVED
APR 20 1992
GROUP 150

Sir:

This Amendment is in response to the Office Action dated December 11, 1991, and is accompanied by a one-month Petition for Extension of Time.

Please amend the application as follows:

IN THE CLAIMS

Claims 12, 14, 15 and 17-20, line 1, after "The" insert
--solid--.

REMARKS

Review and reconsideration on the merits are respectfully requested.

On page 2 of the Office Action, claims 1, 3-12, 14-15 and 17-20 stand rejected under 35 U.S.C. §103 as being unpatentable over Tominaga or Isaac or Kakiuchi in view of Verbanc et al

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AMENDMENT UNDER 37 C.F.R. §1.116

(Verbanc). For convenience, the Examiner's reasoning is set forth below.

Each of the above primary references discloses a composition for golf balls comprised of polybutadiene, an unsaturated carboxylic acid metal salt and an organic peroxide. See Issac (column 2, lines 41-49); Kakiuchi (abstract and Examples); Tominaga (Tables 1-3). The composition of the above primary references differs from the instant invention in that it lacks a sulfur compound as recited in the instant claims. Verbanc et al (column 1, lines 31 through column 2, line 13 and claim 1), however, teach that the processability of elastomers (e.g., polybutadiene) is improved when a zinc salt of an aromatic mercaptan of the benzene and naphthalene series is incorporated into said elastomers. Thus, it would have been obvious to one of ordinary skill in the art to incorporate the zinc salt of an aromatic mercaptan of the benzene and naphthalene series of the secondary reference into the composition of the primary references for the purpose of obtaining the advantages as set forth in the secondary reference.

This rejection is respectfully traversed. Tominaga or Isaac or Kakiuchi, alone or in combination with Verbanc, do not disclose or suggest the present invention.

As presented in the previous response filed October 8, 1991, Tominaga, Isaac and Kakiuchi do not teach or suggest a golf ball as recited in Applicants' claim 1.

Issac discloses a composition for making golf ball products which contain polybutadiene cross-linked by zinc diacrylate and the use of a free radical initiator. However, Isaac fails to disclose or suggest a sulfur compound as recited in Applicants' claim 1 as admitted by the Examiner. Further, there is no suggestion or

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AMENDMENT UNDER 37 C.F.R. §1.116

incentive for one skilled in the art to use the teachings of Isaac to prepare a solid golf ball comprising a sulfur compound taught by the present invention.

Kakiuchi discloses a solid golf ball comprising a polybutadiene, a cross-linking agent such as acrylic and methacrylic acid, an inorganic filler and an organic peroxide. However, Kakiuchi also does not disclose or suggest a sulfur compound as recited in Applicants' claim 1 as admitted by the Examiner.

Tominaga teaches a solid golf ball comprising polybutadiene, metal salt of unsaturated carboxylic acid (e.g., zinc sulfur acrylate acid) and dicumyl peroxide, in addition to a polysulfide compound. However, Tominaga discloses restricting its composition to certain sulfur compounds because it was found that "one group of sulfide compounds has a very superior performance as an agent for regulating the molecular weight of the grafted chain" (column 1, lines 36-40). The working examples of Tominaga also support the restriction to only certain sulfur agents. The sulfur agents disclosed in Tominaga for regulating molecular weight are selected from the group consisting of 2-(4-morpholinyl)dithio)benzothiazole, 4,4'-dithio-bis-dimorpholine, dipentamethylenethiuram tetrasulfide and derivatives thereof (Summary of the Invention, column 1, lines 43-50), which are distinguishable from the recitation of

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thiophenols and metal salts thereof and thiocarboxylic acids and metal salts thereof in Applicants' claim 1. Thus, Tominaga does not disclose or suggest a solid golf ball with the components as recited in Applicants' claim 1.

As previously presented, an essential aspect of the present invention is the incorporation of a specific sulfur compound as recited in Applicants' claim 1. None of the primary references, alone or in combination, disclose, suggest or appreciate this feature. In particular, one object of the present invention is to provide a golf ball having a further improved flying performance. When a thiophenol, thiocarboxylic acid or a metal salt thereof, as recited in Applicants' claim 1, is added to the rubber composition, the rubber composition can be vulcanized into a rubbery elastomer having improved rebound resilience. If a one-piece golf ball or a multi-layered golf ball core is formed from this rubber composition, the resulting solid golf ball exhibits an increased initial velocity upon hitting and improved flying performance.

Thus, the essence of the present invention is the sulfur compound as recited in claim 1, which none of the primary references teach or suggest. Given this, a fortiori none of these references could have appreciated that beneficial results would be obtained upon use of such a sulfur compound.

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In addition, the secondary reference, Verbanc, does not disclose or suggest the present invention or supply the deficiencies of the primary references.

Verbanc discloses zinc salts of aromatic mercaptans as processing agents for elastomeric materials, particularly those of butadiene-styrene and natural rubber. However, Verbanc does not teach or suggest the particular group of sulfur compounds recited in Applicants' claim 1.

Furthermore, Verbanc does not disclose, suggest or appreciate inclusion of an unsaturated carboxylic acid metal salt in its material in contrast to the present invention.

Moreover, a combination of the primary references with Verbanc is not proper. Verbanc does not teach, suggest or appreciate the art of golf balls and, therefore, there is no motivation or suggestion to one of ordinary skill in the art to effect a combination of Verbanc's disclosure with that of the primary references. In addition, Verbanc does not teach or suggest an unsaturated carboxylic acid metal salt which is a component in the golf balls disclosed by the primary references. This compositional difference provides further support that there is no motivation or suggestion to one of ordinary skill in the art to effect such a combination. Finally, it is apparent that the Examiner has

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improperly relied on hindsight to select aspects of each of the references in order to reconstruct the present invention.

For the reasons discussed above, a case of *prima facie* obviousness has not been set forth. However, even if a case of *prima facie* obviousness could be alleged, the comparative experimentation in the present specification (see Tables 1 and 2 on pages 7-8), the data in the Declaration filed on April 12, 1991 (both of which were discussed in the response filed on October 8, 1991), as well as the data in the supplemental Declaration, concurrently filed herewith, illustrate the unexpectedly superior results achieved by the present invention, in particular with respect to improved initial velocity, rebound property, deflection under load and hardness.

In the experimentation, a golf ball prepared in accordance with the present invention achieved superior golf ball properties in comparison to a golf ball (which is representative of Verbanc) which contained a zinc salt of pentachlorothiophenol as a sulfur compound, but which lacked a zinc acrylate as an unsaturated carboxylic acid metal salt component, particularly with respect to rebound property. In addition, a golf ball (which is representative of Tominaga) which used 2-(4-morpholinylthio)benzothiazole as the sulfur compound did not give rise to improved rebound

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properties and resulted in reduced hardness as compared to an example representative of the present invention.

Accordingly, withdrawal of the outstanding rejection under §103 is respectfully requested.

Applicant hereby petitions for any extension of time which may be required to maintain the pendency of this case, and any required fee for such extension is to be charged to Deposit Account No. 19-4880.

Respectfully submitted,



Mark Boland
Registration No. 32,197

SUGHRUE, MION, ZINN,
MACPEAK & SEAS
2100 Pennsylvania Avenue, N.W.
Washington, D.C. 20037
(202) 293-7060

Date: April 13, 1992



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BOX AF

216 - 119

159B
AF

PATENT APPLICATION
RECEIVED

APR 20 1992

GROUP 150 #12/8m
4.222

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

EGASHIRA et al

Application No: 07/521,618

Group Art Unit: 1511

Filed: May 10, 1990

Examiner: Lee, Y.

For: SOLID GOLF BALL

NOTICE OF APPEAL

Honorable Commissioner of
Patents and Trademarks
Washington, D.C. 20231

Sir:

Applicants hereby appeal to the Board of Patent Appeals and Interferences from the final Office Action dated December 11, 1991, finally rejecting claims 1, 3-12, 14, 15 and 17-20.

A check for the statutory fee of \$260.00 is attached. Please charge or credit any difference or overpayment to Deposit Account No. 19-4880. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

Mark Boland

Mark Boland
Registration No. 32,197

SUGHRUE, MION, ZINN,
MACPEAK & SEAS
2100 Pennsylvania Avenue, N.W.
Washington, D.C. 20037-3202
(202) 293-7060

Date: April 13, 1992

060 MC 04/16/92 07521618

1 119 260.00 CK


**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

 Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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07/521,618 05/10/90 EGASHIRA

Y Q23105

EXAMINER

MORGAN, K

 SUGHRUE, MION, ZINN, MACPEAK & SEAS
2100 PENNSYLVANIA AVE., N. W.
WASHINGTON, DC 20037

ART UNIT PAPER NUMBER

1511

14

DATE MAILED: 05/05/92

 This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☐ Responsive to communication filed on _____ ☐ This action is made final.

 A shortened statutory period for response to this action is set to expire 3 month(s), _____ days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-848. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449. | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152. |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474. | 6. <input type="checkbox"/> _____ |

Part II SUMMARY OF ACTION

 1. ☒ Claims 1 and 3 - 12, 19, 15 + 17-20 are pending in the application.

Of the above, claims _____ are withdrawn from consideration.

 2. ☒ Claims 2 + 13 + 16 have been cancelled.

 3. ☐ Claims _____ are allowed.

 4. ☒ Claims 1, 3-12, 19, 15 + 17-20 are rejected.

 5. ☐ Claims _____ are objected to.

 6. ☐ Claims _____ are subject to restriction or election requirement.

 7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.

 8. ☐ Formal drawings are required in response to this Office action.

 9. ☐ The corrected or substitute drawings have been received on _____. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-848).

 10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on _____ has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).

 11. ☐ The proposed drawing correction, filed on _____, has been ☐ approved. ☐ disapproved (see explanation).

 12. ☐ Acknowledgment is made of the claim for priority under U.S.C. 119. The certified copy has ☐ been received ☐ not been received
☐ been filed in parent application, serial no. _____; filed on _____

 13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 483 O.G. 213.

 14. ☐ Other

EXAMINER'S ACTION

Serial No. 07/521,618

-2-

Art Unit 1511

The amendment filed 4/13/92 has been entered.

The finality of the previous office action is withdrawn.

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 1, 3-12, 14-15 and 17-20 are rejected under 35 U.S.C. § 103 as being unpatentable over Tominaga, Issaac or Kakiuchi in view of Kaplan et al..

Each of the above primary references discloses a composition for golf balls comprised of polybutadiene, an unsaturated carboxylic acid metal salt and an organic peroxide. See Isaac (column 2, lines 41-49); Kakiuchi (abstract and Examples); Tominaga (Tables 1-3). The composition of the above primary references

Serial No. 07/521,618

-3-

Art Unit 1511

differs from the instant invention in that it lacks a sulfur compound as recited in the instant claims. Kaplan et al. (column 1, lines 14 through column 1, line 62 and claim 1), however, teach that the processability of elastomers (e.g., polybutadiene) is improved when a iron-free peptizer such as pentachlorothiophenol is incorporated into said elastomers. Thus, it would have been obvious to one of ordinary skill in the art to incorporate the iron-free peptizer of the secondary reference into the composition of the primary references for the purpose of obtaining the advantages as set forth in the secondary reference.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kriellion S. Morgan
KRIELLION S. MORGAN
PRIMARY EXAMINER
ART UNIT 159B

KMorgan/mer
April 30, 1992
(703) 308-2351

TO SEPARATE, HOLD TOP AND BOTTOM EDGES, SNAP-APART AND DISCARD CARBON .

FORM PTO-892 (REV. 3-78)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		SERIAL NO. 521618	GROUP ART UNIT 1511	ATTACHMENT TO PAPER NUMBER 14			
NOTICE OF REFERENCES CITED				APPLICANT(S) Egashira et al					
U.S. PATENT DOCUMENTS									
*		DOCUMENT NO.	DATE	NAME	CLASS	SUB-CLASS	FILING DATE IF APPROPRIATE		
	A	2078519	6/95	Vincent	529	392			
	B	2593895	3/51	Fryling	529	392			
	C	3175992	3/65	Anderson, Jr	529	392			
	D	3923719	12/75	Gattuso	529	392			
	E	4129538	12/78	Kaplan et al	529	392			
	F	4595721	6/86	Deroux et al	529	392			
	G	4735980	9/88	Sturm et al	529	392			
	H								
	I								
	J								
	K								
FOREIGN PATENT DOCUMENTS									
*		DOCUMENT NO.	DATE	COUNTRY	NAME	CLASS	SUB-CLASS	PERTINENT SHTS. DWG	PP. SPEC.
	L								
	M								
	N								
	O								
	P								
	Q								
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)									
	R								
	S								
	T								
	U								
EXAMINER Krellin S. Moya				DATE 9/92					
* A copy of this reference is not being furnished with this office action. (See Manual of Patent Examining Procedure, section 707.05 (a).)									



IN THE U.S. PATENT AND TRADEMARK OFFICE

APPLICANT : Yoshinori EGASHIRA et al
SERIAL NO.: 07/521,618
FILED: May 10, 1990
FOR: SOLID GOLF BALL
GROUP: 1511
EXAMINER: KRIELLIONS MORGAN

#15/80m
09.22.92

RECEIVED GROUP 150
AUG 06 1992

DECLARATION

Honorable Commissioner of Patents and Trademarks
Washington, D.C. 20231

Sir,

I, Yoshinori EGASHIRA, a citizen of Japan
and a resident of No. 6-6, Musashidai 7-chome,
Hidaka-machi, Iruma-gun, Saitama-ken, Japan
do hereby declare that:

1. I was graduated from Kurume College of
Technology, Japan in March, 1975. Since April
1975, I have been employed by Bridgestone
Corporation, the assignee of the above-
identified application. I have been engaged in
research and development in the field of golf
balls.

2. I am one of the named inventors of the above-identified application and hence, am familiar with the subject matter disclosed in said application.

3. In order to show the feature of the present invention, I conducted the following experiments.

[Experiment]

Rubber compositions were prepared by blending the ingredients shown in Table 1. Two-piece golf ball solid core having a diameter of 38.4 mm were prepared by molding the composition in a mold and vulcanizing at 155°C for 20 minutes.

The balls were measured for hardness and rebound resilience. The hardness of the balls was measured as deflection (in mm) under a load of 100 kg. The initial velocity (in m/sec.) of the balls was measured by a hitting test according to the USGA standard in which the balls were hit at a head speed of 38 m/sec. using a hitting machine of the fly wheel type. The rebound property of the balls was measured as a distance of rebound by dropping the balls from a height of 120 cm.

The results are shown in Table 1.

Table 1

Core composition	No. 1	No. 2	No. 3
IR	10	10	10
BR	90	90	90
zinc acrylate	32	32	—
zinc oxide	21	21	21
Antioxidant	0.2	0.2	0.2
Dicumyl peroxide	1.0	—	1.0
Zinc salt of pentachlorothiophenol	0.2	0.2	0.2
Ball properties			
Hardness (JIS - C)	76	—	12
Deflection under a load of 100 kg (mm)	3.05	—	—
Rebound property	101.7	—	86.5
Initial velocity (m/sec)	72.96	—	—

As is apparent from the results of Table 1, the core compositions containing no dicumyl peroxide or no zinc acrylate gives inferior ball properties. It should be noted that since the core composition No. 2 containing no dicumyl peroxide hardly cured, the ball properties could not be measured.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Dated this 24th day of July, 1992

Yoshinori Egashira
Yoshinori EGASHIRA



PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

EGASHIRA et al.

Application No.: 07/521,618

Group Art Unit: 1511

Filed: May 10, 1990

Examiner: Morgan, K.

For: SOLID GOLF BALL

#16/1871
07-22-92

RECEIVED GROUP 150
AUG 6 1992

RESPONSE

Honorable Commissioner of
Patents & Trademarks
Washington, DC 20231

Sir:

The following is responsive to the Office Action dated May 5, 1992, in the above-identified application.

REMARKS

Review and reconsideration on the merits are respectfully requested.

On page 2 of the Office Action, 1, 3-12, 14, 15 and 17-20 stand rejected under 35 U.S.C. §103 as being unpatentable over Tominaga, Isaac or Kakiuchi in view of Kaplan et al. (Kaplan). For convenience, the Examiner's reasoning is set forth below:

Each of the above primary references discloses a composition for golf balls comprised of polybutadiene, an unsaturated carboxylic acid metal salt and an organic peroxide. See Isaac (column 2, lines 41-49); Kakiuchi (Abstract and examples); Tominaga (Tables 1-3). The composition of the above primary references differs from the instant invention in that it lacks a sulfur compound as recited in the instant claims. Kaplan (column 1, lines 14 through column 1, line 62 and claim 1), however, teaches that the processability of elastomers (e.g., polybutadiene) is improved when an iron-free peptizer

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RESPONSE

such as pentachlorothiophenol is incorporated into said elastomers. Thus, it would have been obvious to one of ordinary skill in the art to incorporate the iron-free peptizer of the secondary reference into the composition of the primary references for the purpose of obtaining the advantages as set forth in the secondary reference.

This rejection is respectfully traversed.

An essential aspect of the golf ball of the present invention is the incorporation of a specific sulfur compound as recited in Applicants' claim 1. In particular, one object of the present invention is to provide a golf ball having a further improved flying performance. When a thiophenol, thiocarboxylic acid or a metal salt thereof, as recited in Applicants' claim 1, is added to the rubber composition, the rubber composition can be vulcanized into a rubbery elastomer having improved rebound resilience. If a one-piece golf ball or a multi-layered golf ball core is formed from this rubber composition, the resulting solid golf ball exhibits an increased initial velocity upon hitting and improved flying performance.

As previously presented and, as admitted by the Examiner, the primary references fail to teach a golf ball composition comprising a sulfur compound as recited in Applicants' claim 1.

Thus, the Examiner relies on Kaplan to supply the deficiencies in the primary references. Specifically, the Examiner refers to column 1, lines 14-62, and claim 1 for a teaching of

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RESPONSE

pentachlorothiophenol incorporated into an elastomer such as polybutadiene.

Kaplan discloses a peptizing composition, which effectively peptizes both natural rubber and synthetic butadiene-styrene rubber, comprising (1) a blend of a mixture of an iron-free peptizer and a zinc salt of mixed fatty acids, and (2) an iron phthalocyanine. Kaplan discloses that useful examples of the iron-free peptizer include pentachlorothiophenol and zinc pentachlorothiophenol.

However, Kaplan is not properly combinable with the primary references. Kaplan does not teach, suggest or appreciate the art of golf balls. Thus, the skilled artisan would not look to Kaplan to improve or modify a golf ball composition.

In addition, Kaplan does not teach, suggest or appreciate the use of an organic peroxide in his composition. Because there are differences in the compositions of the primary references and the composition of Kaplan, there is no motivation or suggestion to one of ordinary skill in the art to effect such a combination.

Even if, *arguendo*, a combination of the references would be proper, Kaplan does not teach or suggest the present invention or supply the deficiencies in the disclosure of Tominaga, Isaac or Kakiuchi.

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Kaplan fails to disclose or suggest the art or technique of manufacturing golf balls. In this regard, the sulfur compound used in golf balls of the present invention serves to improve rebound resistance, to increase initial velocity upon hitting, and to improve flying performance for golf balls, but is not used for processability. Thus, Kaplan's disclosure which is unrelated to the art of golf balls does not teach or suggest a composition having the properties of the golf ball composition of the present invention or the advantages thereof. In particular, there is no suggestion to the skilled artisan to incorporate a sulfur compound into a golf ball composition to achieve the properties of the golf ball composition of the present invention because Kaplan only discloses an improvement in processability of elastomers by the use of an iron-free peptizer such as pentachlorothiophenol.

Furthermore, Kaplan's composition is distinguishable from the golf ball composition of the present invention. Among other distinctions, Kaplan does not teach or suggest an organic peroxide in his composition.

Also, Kaplan does not teach a composition having an unsaturated carboxylic acid metal component, much less a zinc or magnesium salt of an unsaturated fatty acid having 3 to 8 carbon atoms as recited in Applicants' claim 12, in a large amount, i.e. about 25 to about 40 parts by weight per 100 parts by weight of a

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RESPONSE

base rubber as recited in Applicants' claim 1, or the advantages thereof.

In addition, Kaplan teaches a composition applied to natural rubber and butadiene-styrene rubber. However, Kaplan does not teach or suggest applying his composition to a rubber such as polybutadiene.

For the reasons discussed above, a case of *prima facie* obviousness has not been set forth. However, even if a case of *prima facie* obviousness could be alleged, the comparative experimentation in the present specification (see Tables 1 and 2 on pages 7-8), the data in the Declarations filed on April 12, 1991, and April 13, 1992, (each of which were discussed in the response filed on April 13, 1992), as well as the data in the supplemental Declaration, concurrently filed herewith, illustrate the unexpectedly superior results achieved by the present invention, in particular with respect to improved initial velocity, rebound property, deflection under load and hardness.

In the experimentation set forth in the supplemental Declaration concurrently filed, a golf ball was prepared in accordance with the present invention and compared to a golf ball prepared in accordance with Kaplan's composition. In preparing examples representative of Kaplan, iron phthalocyanine was sought

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RESPONSE

to be included in the representative examples of Kaplan. However, the present inventors were not familiar with iron phthalocyanine and only were aware of its existence because of the disclosure of Kaplan, particularly because iron phthalocyanine has not been used as a component of golf balls. This material, however, was not available and, thus, examples using iron phthalocyanine could not be conducted as part of the experimentation.

The golf ball representative of the present invention (No. 1) achieved superior golf ball properties such as hardness, deflection under a load, rebound property and initial velocity in comparison to the golf ball representative of Kaplan (No. 2) which lacked an organic peroxide. In fact, in the example representative of Kaplan which lacked organic peroxide, the golf ball properties could not be measured.

In addition, the golf ball composition (No. 3) which lacked zinc acrylate gave rise to inferior golf ball properties in terms of hardness and rebound property and deflection under load and initial velocity could not be measured. Thus, unexpectedly superior results of the present invention have been demonstrated, particularly in comparison to Kaplan's disclosure.

Accordingly, withdrawal of the outstanding rejection under §103 is respectfully requested.

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RESPONSE

All claims should now be in condition for allowance. Early indication of allowability is respectfully requested. Should any minor points remain prior to issuance of a Notice of Allowance, the Examiner is requested to telephone the undersigned at the below listed telephone number.

Respectfully submitted,



Doreen S. Lader
Registration No. 35,580

SUGHRUE, MION, ZINN,
MACPEAK & SEAS
2100 Pennsylvania Ave., NW
Washington, DC 20037
(202) 293-7060

Dated: August 5, 1992


UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

 Address: COMMISSIONER OF PATENTS AND TRADEMARKS
 Washington, D.C. 20231

SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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D.G. 07/521,618 05/10/90 EGASHIRA

Y Q23105

EXAMINER

MORGAN, K

ART UNIT

PAPER NUMBER 17

 SUGHRUE, MION, ZINN, MACPEAK & SEAS
 2100 PENNSYLVANIA AVE., N. W.
 WASHINGTON, DC 20037

1511

DATE MAILED: 10/13/92

 This is a communication from the examiner in charge of your application.
 COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☒ Responsive to communication filed on 8/5/92 ☒ This action is made final.

 A shortened statutory period for response to this action is set to expire 3 month(s), days from the date of this letter.
 Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited by Examiner, PTO-882. | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-948. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449. | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152. |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474. | 6. <input type="checkbox"/> _____ |

Part II SUMMARY OF ACTION

 1. ☒ Claims 1, 3-12, 14, 15 and 17-20 are pending in the application.

Of the above, claims _____ are withdrawn from consideration.

 2. ☐ Claims _____ have been cancelled.

 3. ☐ Claims _____ are allowed.

 4. ☒ Claims 1, 3-12, 14, 15 and 17-20 are rejected.

 5. ☐ Claims _____ are objected to.

 6. ☐ Claims _____ are subject to restriction or election requirement.

 7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.65 which are acceptable for examination purposes.

 8. ☐ Formal drawings are required in response to this Office action.

 9. ☐ The corrected or substitute drawings have been received on _____. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable, ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-948).

 10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on _____ has (have) been ☐ approved by the examiner, ☐ disapproved by the examiner (see explanation).

 11. ☐ The proposed drawing correction, filed on _____, has been ☐ approved, ☐ disapproved (see explanation).

 12. ☐ Acknowledgment is made of the claim for priority under U.S.C. 119. The certified copy has ☐ been received, ☐ not been received
☐ been filed in parent application, serial no. _____; filed on _____

 13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

 14. ☐ Other

EXAMINER'S ACTION

Serial No. 521,618

-2-

Art Unit 1511

Claims 1, 3-12, 14-15 and 17-20 are rejected under 35 U.S.C. § 103 as being unpatentable over Tominaga, Issac or Kakiuchi in view of Kaplan et al.

Each of the above primary references discloses a composition for golf balls comprised of polybutadiene, and unsaturated carboxylic acid metal salt and an organic peroxide. See Issac (column 2, lines 41-49); Kakiuchi (abstract and Examples); Tominaga (Tables 1-3). The composition of the above primary references differs from the instant invention in that it lacks a sulfur compound as recited in the instant claims. Kaplan et al. (column 1, lines 14 through column 1, line 62 and claim 1), however, teach that the processability of elastomers (e.g., polybutadiene) is improved when a iron-free peptizer such as pentachlorothiophenol is incorporated into said elastomers. Thus, it would have been obvious to one of ordinary skill in the art to incorporate the iron-free peptizer of the secondary references into the composition of the primary references for the purpose of obtaining the advantages as set forth in the secondary reference.

Applicant's arguments filed 8/5/92 have been fully considered but they are not deemed to be persuasive.

Given the benefit of all prior art relied upon, the ordinary practitioner in the rubber art would have found clear incentive to employ the pentachlorothiophenol peptizing agent of Kaplan et al. into a styrene-butadiene rubber composition for the purpose of

Serial No. 521,618

-3-

Art Unit 1511

breaking down the rubber prior to its compounding or vulcanization. The lowered resulting viscosity facilitates the compounding process. Hence the ordinary practitioner of this art would have found clear incentive to subject the styrene/butadiene rubber to just such a peptizing process prior to compounding with additional organic peroxide and unsaturated carboxylic acid metal salt as taught by the primary references.

Applicants comparative data as set forth at page 7 of the specification has not been found to be persuasive in that it is not representative of the closest prior art compositions as described by the primary references of record. Patentees are specific to the inclusion of sulfur-containing agents. Applicants comparative examples omitt sulfur containing agents and are therefore not representative of that which is considered conventional in the art.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a). The practice of automatically extending the shortened statutory period an additional month upon the filing of a timely first response to a final rejection has been discontinued by the Office. See 1021 TMOG 35.

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE

Serial No. 521,618

-4-

Art Unit 1511

ADVISORY ACTION: IN NO EVENT WILL THE STATUTORY PERIOD FOR
RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL
ACTION.

K. Morgan/jfb
October 8, 1992
703-308-4359

KRIELLION S MORGAN
PRIMARY EXAMINER
ART UNIT 159B



\$360⁰⁰ - 116

GP/154

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

EGASHIRA et al.

Application No.: 07/521,618

Group Art Unit: 1511

Filed: May 10, 1990

Examiner: Morgan, K.

For: SOLID GOLF BALL

#18/m
4.2.93

PETITION FOR EXTENSION OF TIME
UNDER 37 C.F.R. §1.136 AND
PAYMENT OF FEE UNDER 37 C.F.R. §1.17

RECEIVED
MAR 30 1993
GROUP 150

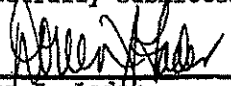
Honorable Commissioner of
Patents & Trademarks
Washington, DC 20031

Sir:

Applicants hereby petition for an extension of time of two months, extending the time to respond to the Office Action dated October 13, 1992, to March 15, 1993 (March 13, 1993 being a Saturday). A check for the appropriate fee of \$360.00 is attached.

Please charge any additional fees under 37 C.F.R. §1.16 or §1.17 necessary to keep this application pending in the U.S.P.T.O. or credit any overpayment to Deposit Account No. 19-4880. A duplicate copy of this sheet is attached.

Respectfully submitted,


Doreen S. Lader
Registration No. 35,580

SUGHRUE, MION, ZINN,
MACPEAK & SEAS
2100 Pennsylvania Ave., NW
Washington, DC 20037
(202) 293-7060

Dated: March 12, 1993
120 WP 03/29/93 07521618

1 116 360.00 EK



AMENDMENT UNDER 37 C.F.R. §1.116
EXPEDITED PROCEDURES
EXAMINING GROUP ART UNIT 1511

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

EGASHIRA et al.

Application No.: 07/521,618

Group Art Unit: 1511

Filed: May 10, 1990

Examiner: Morgan, K.

For: SOLID GOLF BALL

AMENDMENT UNDER 37 C.F.R. §1.116

ATTN: BOX AP
Honorable Commissioner of
Patents & Trademarks
Washington, DC 20231

RECEIVED
MAR 5 0 1993
GROUP 150

Sir:

This Amendment is responsive to the Office Action dated October 13, 1992. The period for response has been extended for two months to March 15, 1993 (March 13, 1993 being a Saturday), by a Petition for an Extension of Time Under 37 C.F.R. §1.136 and a check for the appropriate fee under 37 C.F.R. §1.17 filed concurrently herewith.

Please amend the above-identified application as follows:

IN THE CLAIMS

1. (Thrice Amended) A solid golf ball, having an improved rebound property and initial velocity, comprising a rubber composition containing 100 parts by weight of a base rubber selected from the group consisting of polybutadiene rubber, natural

U.S. APPLICATION NO. 07/521,618
 AMENDMENT UNDER 37 C.F.R. §1.116

rubber, polyisoprene rubber and styrene-butadiene rubber, about 25 to about 40 parts by weight of a zinc or magnesium salt of an unsaturated [carboxylic] fatty acid having 3 to 8 carbon atoms [metal salt], about 0.05 to about 2 parts by weight of a sulfur compound selected from the group consisting of pentachlorothiophenol, 4-t-butyl-o-thiocresol, 4-t-butyl-p-thiocresol, 2-benzamidothiophenol, thiobenzoic acid, and zinc [thiophenols and metal] salts thereof, [and thiocarboxylic acids and metal salts thereof,] and about 0.5 to about 3 parts by weight of an organic peroxide.

Please cancel claims 12, 14, 15 and 17, without prejudice or disclaimer.

REMARKS

Review and reconsideration on the merits are respectfully requested.

Claim 1 has been amended as shown to incorporate the subject matter of claims 12, 14, 15 and 17, now cancelled, and, specifically, the preamble has been amended as supported by the disclosure in the specification, for example, at page 2, lines 10-22.

No new matter has been added and the amendment clearly places the claims in condition for allowance, or at a minimum, in better condition for appeal by reducing the number of issues. Therefore, entry is respectfully requested.

U.S. APPLICATION NO. 07/521,618
AMENDMENT UNDER 37 C.F.R. §1.116

On page 2 of the Office Action, claims 1, 3-12, 14, 15 and 17-20 stand rejected under 35 U.S.C. §103 as being unpatentable over Tominaga et al. (Tominaga), Isaac or Kakiuchi et al. (Kakiuchi) in view of Kaplan et al. (Kaplan).

Basically, the Examiner repeats her reasoning from the prior Office Action dated May 5, 1992. In addition, the Examiner provides specific comments addressing Applicants' arguments filed August 5, 1992, which are discussed below.

This rejection is respectfully traversed.

As explained in previous responses, one essential aspect of the golf ball of the present invention is the incorporation of a specific sulfur compound in order to satisfy one of the objectives of the present invention, namely, providing a golf ball having a further improved flying performance. When a sulfur compound selected from the group consisting of pentachlorothiophenol, 4-t-butyl-o-thiocresol, 4-t-butyl-p-thiocresol, 2-benzamidothiophenol, thiobenzoic acid and zinc salts thereof, as recited in Applicants' claim 1 as amended, is added to the rubber composition, the rubber composition can be vulcanized into a rubbery elastomer having improved rebound resilience and a solid golf ball made therefrom exhibits an increased initial velocity upon hitting and improved flying performance.

U.S. APPLICATION NO. 07/521,618
AMENDMENT UNDER 37 C.F.R. §1.116

Applicants have previously made arguments distinguishing Tominaga, Isaac and Kakiuchi as primary references and rely on these arguments of record herein. In fact, the Examiner has repeatedly admitted that the primary references differ from the present invention because they fail to teach a golf ball composition comprising a sulfur compound as recited in Applicants' claim 1.

The Examiner then relies on Kaplan for a teaching of pentachlorothiophenol incorporated into an elastomer such as polybutadiene.

The Examiner asserts that, given the benefit of all prior art relied upon, the skilled artisan would have found clear incentive to employ the pentachlorothiophenol peptizing agent of Kaplan into a styrene-butadiene rubber composition for the purpose of breaking down the rubber prior to its compounding or vulcanization since the lowered resulting viscosity facilitates the compounding process. The Examiner further asserts that the skilled artisan would have found clear incentive to subject the styrene-butadiene rubber to just such a peptizing process prior to compounding with additional organic peroxide and unsaturated carboxylic acid metal salt, as taught by the primary references.

U.S. APPLICATION NO. 07/521,618
AMENDMENT UNDER 37 C.F.R. §1.116

However, Kaplan is not properly combinable with the primary references. Kaplan teaches an iron phthalocyanine compound in the peptizing composition along with zinc salts of mixtures of fatty acids having 14 to 20 carbon atoms in admixture with an iron-free peptizer, which can include pentachlorothiophenol. In addition, Kaplan does not teach, suggest or appreciate the use of an organic peroxide in his composition. On the other hand, the compositions of the primary references include organic peroxide and generally relate to fatty acid components having a low carbon number. Thus, the compositions of Kaplan is distinguishable from the respective compositions of the primary references, and the skilled artisan would not be motivated to look to Kaplan to improve or modify the primary references or vice versa.

Further, a combination of the primary references with Kaplan entails viewing Kaplan's teachings (as well as those of the primary references) as a whole, not just picking and choosing select disclosure. In fact, the selection of a sulfur compound/iron-free peptizer, much less a particular sulfur compound in accordance with the present invention, rather than an iron-free peptizer in combination with iron phthalocyanine, which is essentially the crux of Kaplan, for incorporation into the compositions of the primary references relies on hindsight and is improper.

U.S. APPLICATION NO. 07/521,618
AMENDMENT UNDER 37 C.F.R. §1.116

In addition, Kaplan fails to disclose or suggest the art or technique of manufacturing golf balls. In particular, Kaplan does not appreciate the use of a sulfur compound in golf balls to improve rebound resistance, to increase initial velocity upon hitting, and to improve flying performance for golf balls. Thus, there is no suggestion to the skilled artisan to incorporate a sulfur compound into a golf ball composition in general, much less a composition in accordance with the primary references, which either do not teach a sulfur component at all or, at the very least, a similar sulfur component, to achieve improved properties in a golf ball composition. Rather, Kaplan only discloses an improvement in processability of elastomers by the use of an iron-free peptizer such as pentachlorothiophenol.

Therefore, a combination of Kaplan with any or all of Isaac, Tominaga and Kakiuchi is improper.

Even if, *arguendo*, a combination of the references was proper, Kaplan does not teach or suggest the present invention or supply the deficiencies in the disclosure of Tominaga, Isaac or Kakiuchi.

Kaplan does not teach, suggest or appreciate the art of producing golf balls and, in particular, the role of sulfur in a golf ball composition to achieve the properties discussed above. Thus, Kaplan does not provide disclosure of a golf ball composition

U.S. APPLICATION NO. 07/521,618
AMENDMENT UNDER 37 C.F.R. §1.116

or a solid golf ball containing the same, in accordance with the present invention.

Further, Kaplan's composition is distinguishable from the golf ball composition of the present invention. Among other distinctions, Kaplan does not teach or suggest an organic peroxide in his composition.

Also, Kaplan does not teach a composition having a zinc or magnesium salt of an unsaturated fatty acid having 3 to 8 carbon atoms, much less the use of this component in a large amount, i.e. about 25 to about 40 parts by weight per 100 parts by weight of a base rubber as recited in Applicants' claim 1 as amended, or the advantages thereof. Rather, Kaplan teaches mixtures of unsaturated fatty acids having 14 to 20 carbon atoms.

In addition, Kaplan does not teach or suggest the use of a sulfur compound such as 4-t-butyl-o-thiocresol, 4-t-butyl-p-thiocresol, 2-benzamidothiophenol, thiobenzoic acid and zinc salts thereof.

Thus, a case of *prima facie* obviousness has not been established.

However, even if a case of *prima facie* obviousness could be alleged, the comparative experimentation of record, particularly the supplemental Declaration filed August 5, 1992, illustrates the

U.S. APPLICATION NO. 07/521,618
AMENDMENT UNDER 37 C.F.R. §1.116

unexpectedly superior properties of the solid golf ball of the present invention, in particular with respect to improved initial velocity, rebound property, deflection under load and hardness.

In the supplemental Declaration, the golf ball representative of the present invention (No. 1) achieved superior golf ball properties such as hardness, deflection under a load, rebound property and initial velocity in comparison to the golf ball representative of Kaplan (No. 2) which lacked an organic peroxide. In fact, in the example representative of Kaplan which lacked organic peroxide, the golf ball properties could not be measured.

In addition, the golf ball composition (No. 3) which lacked zinc acrylate gave rise to inferior golf ball properties in terms of hardness and rebound property and deflection under load and initial velocity could not be measured. Thus, the unexpectedly superior properties of solid golf ball of the present invention have been demonstrated, particularly in comparison to Kaplan's disclosure.

The Examiner asserts that Applicants' comparative data as set forth at page 7 of the specification has not been found to be persuasive and that it is not representative of the closest prior art composition as described by the primary references of record. The Examiner asserts that the prior art is specific as to the inclusion of sulfur-containing agents and that Applicants'

U.S. APPLICATION NO. 07/521,618
AMENDMENT UNDER 37 C.F.R. §1.116

comparative examples omit sulfur-containing agents and are, therefore, not representative of that which is considered conventional in the art.

Because it appears that the Examiner has only considered the comparative data as set forth in the specification, it is respectfully considered that the Examiner consider the most recent Declaration filed August 5, 1992, discussed above as well as in more detail in the Response also filed August 5, 1992, which provides comparative examples which include sulfur-containing agents.

Also, in view of the cumulative results of the previously submitted Declarations, Applicants have compared an example representative of Tominaga, having a sulfur-containing agent which is outside the scope of the present invention; examples representative of Isaac and Kakiuchi, which omit a sulfur-containing agent; and an example representative of Kaplan, which omits the use of an organic peroxide. Any assertion that a combination of the teachings of the references must be compared is incorrect and improper since only the closest prior art needs to be compared. To expect otherwise would be to expect a comparison of the present invention with the present invention.

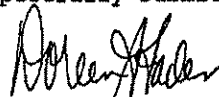
U.S. APPLICATION NO. 07/521,618
AMENDMENT UNDER 37 C.F.R. §1.116

Therefore, assuming, *arguendo*, it was necessary to address a case of *prima facie* obviousness, the comparative experimentation, which is provided in the comparative examples of the present specification as well as the Declarations previously submitted, demonstrates a full comparison between the present invention and each of the references, both primary and secondary, cited by the Examiner and shows unexpectedly superior properties, in each instance, for the present invention.

Accordingly, withdrawal of the rejection under §103 is respectfully requested.

All claims should now be in condition for allowance. Early indication of allowability is respectfully requested. Should any minor points remain prior to issuance of a Notice of Allowance, the Examiner is requested to telephone the undersigned at the below listed telephone number.

Respectfully submitted,



Doreen S. Hader
Registration No. 35,580

SUGHRUE, MION, ZINN,
MACPEAK & SEAS
2100 Pennsylvania Ave., NW
Washington, DC 20037
(202) 293-7060

Dated: March 12, 1993



\$270⁰⁰-119

GP/ 1511

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

EGASHIRA et al.

Application No.: 07/521,618

Group Art Unit: 1511

Filed: May 10, 1990

Examiner: Morgan, K.

For: SOLID GOLF BALL

#20/000
4.2.93

NOTICE OF APPEAL

Honorable Commissioner of
Patents and Trademarks
Washington, D.C. 20231

RECEIVED
MAR 30 1993
GROUP 150

Sir:

Applicants hereby appeals to the Board of Patent Appeals and Interferences from the final Office Action dated October 13, 1992, finally rejecting claims 1, 3-12, 14, 15 and 17-20.

A check for the statutory fee of \$270.00 is attached. Please charge or credit any difference or overpayment to Deposit Account No. 19-4880. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

Doreen S. Lader
Registration No. 35,580

SUGHRUE, MION, ZINN,
MACPEAK & SEAS
2100 Pennsylvania Ave., NW
Washington, DC 20037
(202) 293-7060

Dated: March 12, 1993

120 WP 03/29/93 07521618

1 119 270.00 CK



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
---------------	-------------	-----------------------	---------------------

07/521,618 05/10/90 EGASHIRA

Y Q23105

EXAMINER

MORGAN, K

SUGHRUE, MION, ZINN, MACPEAK & SEAS 15M1
2100 PENNSYLVANIA AVE., N. W.
WASHINGTON, DC 20037

ART UNIT PAPER NUMBER

1511

DATE MAILED:

04/09/93

NOTICE OF ALLOWABILITY

PART I

1. ☒ This communication is responsive to applicant's communication filed 3/12/93.
2. ☒ All the claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice Of Allowance And Issue Fee Due or other appropriate communication will be sent in due course.
3. ☒ The allowed claims are 1 and 3-20.
4. ☒ The drawings filed on 5/10/90 are acceptable.
5. ☒ Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☒ been received. ☐ not been received. ☐ been filed in parent application Serial No. _____, filed on _____.
6. ☐ Note the attached Examiner's Amendment.
7. ☐ Note the attached Examiner Interview Summary Record, PTOL-413.
8. ☒ Note the attached Examiner's Statement of Reasons for Allowance.
9. ☐ Note the attached NOTICE OF REFERENCES CITED, PTO-892.
10. ☐ Note the attached INFORMATION DISCLOSURE CITATION, PTO-1449.

PART II

A SHORTENED STATUTORY PERIOD FOR RESPONSE to comply with the requirements noted below is set to EXPIRE THREE MONTHS FROM THE "DATE MAILED" indicated on this form. Failure to timely comply will result in the ABANDONMENT of this application. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

1. ☐ Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION, PTO-152, which discloses that the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED.
2. ☐ APPLICANT MUST MAKE THE DRAWING CHANGES INDICATED BELOW IN THE MANNER SET FORTH ON THE REVERSE SIDE OF THIS PAPER.
 - a. ☐ Drawing informalities are indicated on the NOTICE RE PATENT DRAWINGS, PTO-848, attached hereto or to Paper No. _____. CORRECTION IS REQUIRED.
 - b. ☐ The proposed drawing correction filed on _____ has been approved by the examiner. CORRECTION IS REQUIRED.
 - c. ☐ Approved drawing corrections are described by the examiner in the attached EXAMINER'S AMENDMENT. CORRECTION IS REQUIRED.
 - d. ☐ Formal drawings are now REQUIRED.

Any response to this letter should include in the upper right hand corner, the following information from the NOTICE OF ALLOWANCE AND ISSUE FEE DUE: ISSUE BATCH NUMBER, DATE OF THE NOTICE OF ALLOWANCE, AND SERIAL NUMBER.

Attachments:

- | | |
|--|--|
| <input type="checkbox"/> Examiner's Amendment | <input type="checkbox"/> Notice of Informal Application, PTO-152 |
| <input type="checkbox"/> Examiner Interview Summary Record, PTOL-413 | <input type="checkbox"/> Notice re Patent Drawings, PTO-848 |
| <input checked="" type="checkbox"/> Reasons for Allowance | <input type="checkbox"/> Listing of Bonded Draftsmen |
| <input type="checkbox"/> Notice of References Cited, PTO-892 | <input type="checkbox"/> Other |
| <input type="checkbox"/> Information Disclosure Citation, PTO-1449 | |

KRIELLION S MORGAN
PRIMARY EXAMINER
ART UNIT 159B

Serial Number: 07521618
Art Unit: 1511

-2-

I. The following is an Examiner's Statement of Reasons for Allowance: Nothing in the prior art would suggest that utilization of the sulfur-containing agents, such as the penta-chlorothiophenol disclosed by Kaplan et al., in lieu of the sulfur-containing molecular weight regulators of Tominaga et al. would result in rubber golf balls having improved velocity upon impact.

Any comments considered necessary by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably accompany the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

KRIELLION S MORGAN
PRIMARY EXAMINER
ART UNIT 159B



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: Box ISSUE FEE
COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

SUGHRUE, MION, ZINN, MACPEAK & SEAS 15M1
2100 PENNSYLVANIA AVE., N. W.
WASHINGTON, DC 20037

**NOTICE OF ALLOWANCE
AND ISSUE FEE DUE**

- ☐ Note attached communication from the Examiner
☐ This notice is issued in view of applicant's communication filed

SERIES CODE/SERIAL NO.	FILING DATE	TOTAL CLAIMS	EXAMINER AND GROUP ART UNIT	DATE MAILED
07/521,618	05/10/90	019	MORGAN, K	1511 04/09/93
First Named Applicant EGASHIRA, YOSHINORI				

TITLE OF
INVENTION SOLID GOLF BALL

ATTY'S DOCKET NO.	CLASS-SUBCLASS	BATCH NO.	APPLN. TYPE	SMALL ENTITY	FEE DUE	DATE DUE
1 023105	524-392.000	M11	UTILITY	NO	\$1170.00	07/09/93

THE FEE DUE IS THE AMOUNT IN EFFECT AT THIS TIME. IF THE AMOUNT OF THE ISSUE FEE INCREASES PRIOR TO PAYMENT, APPLICANT WILL BE NOTIFIED OF THE BALANCE OF ISSUE FEE DUE.

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT.

PROSECUTION ON THE MERITS IS CLOSED.

THE ISSUE FEE MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED.

HOW TO RESPOND TO THIS NOTICE:

- I. Review the SMALL ENTITY Status shown above.
If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is changed, pay twice the amount of the FEE DUE shown above and notify the patent and Trademark Office of the change in status, or
B. If the Status is the same, pay the FEE DUE shown above.

- II. Part B of this notice should be completed and returned to the Patent and Trademark Office (PTO) with your ISSUE FEE. Even if the ISSUE FEE has already been paid by charge to deposit account, Part B should be completed and returned. If you are charging the ISSUE FEE to your deposit account, Part C of this notice should also be completed and returned.

- III. All communications regarding this application must give series code (or filing date) and serial number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to contrary.

IMPORTANT REMINDER: Patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

If the SMALL ENTITY is shown as NO:

- A. Pay FEE DUE shown above, or
B. File verified statement of Small Entity Status before, or with, pay of 1/2 the FEE DUE shown above.



RECEIVED
ALLOWED FILES/CORRESPONDENCE
PUBLISHING DIVISION

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

EGASHIRA et. al.

Application No.: 07/521,618

Allowed: April 9, 1993

Filed: May 10, 1990

Batch No.: M11

For: SOLID GOLF BALL

AMENDMENT UNDER 37 C.F.R. §1.312

Honorable Commissioner of
Patents & Trademarks
Washington, DC 20231

Sir:

Pursuant to 37 C.F.R. §1.312, please amend the above-identified application as follows:

IN THE CLAIMS

2. (Amended) The solid golf ball of claim 1, wherein said solid golf ball [which] is a one-piece golf ball[, the ball being] which is formed of said rubber composition.

3. (Amended) The solid golf ball of claim 1, wherein said solid golf ball [which] is a multi-layered golf ball comprising a core and a cover enclosing the core, and said core is [being] formed of said rubber composition.

4. (Amended) The solid golf ball of claim 3, wherein said solid golf ball [which] is a two-piece ball, and said [wherein the] core is directly enclosed in the cover.

U.S. APPLICATION NO. 07/521,618
AMENDMENT UNDER 37 C.F.R. §1.312


E1 *5A* (Amended) The solid golf ball of claim ³~~1~~, wherein said solid golf ball [which] further comprises [includes] an intermediate layer [disposed] between the core and the cover.

REMARKS

The amendments to claims 3-6 are editorial in nature and were made for clarification. No new matter has been added and the amendments do not raise new issues or require further search or consideration. Therefore, entry is respectfully requested.

In addition, Applicants note that the Notice of Allowance indicates a total of 19 claims are allowed, and the Notice of Allowability indicates that claims 1 and 3-20 are allowed. However, claims 2 and 12-17 were cancelled in previous Amendments. Accordingly, the Examiner is respectfully requested to correct the Notice of Allowance and Notice of Allowability to indicate that a total of 13 claims, i.e., claims 1, 3-11 and 18-20, are allowed.

Respectfully submitted,


Doreen S. Lader
Registration No. 35,580

SUGHRUE, MION, ZINN,
MACPEAK & SEAS
2100 Pennsylvania Ave., NW
Washington, DC 20037
(202) 293-7060

Dated: April 13, 1993


UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

 Address: COMMISSIONER OF PATENTS AND TRADEMARKS
 Washington, D.C. 20231

SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
---------------	-------------	-----------------------	---------------------

07/521,618 05/10/90 EGASHIRA

Y Q23105

MORGAN, KEXAMINER

 15M1
 SUGHRUE, MION, ZINN, MACPEAK & SEAS
 2100 PENNSYLVANIA AVE., N. W.
 WASHINGTON, DC 20037

ART UNIT PAPER NUMBER

1511

DATE MAILED:

05/21/93

- A. ☐ The petition filed _____ under 37 CFR 1.312(b) is granted.
 The paper has been forwarded to the examiner for consideration on the merits.

- B. ☒ The amendment filed 4/13/93 under 37 CFR 1.312 has been considered, and has been:

1. ☒ entered
2. ☐ entered as directed to matters of form not affecting the scope of the invention (0.3311).
3. ☐ disapproved. A report appears below.
4. ☐ entered in part. A report appears below.

Report:

Kriellion S Morgan
 KRIELLION S MORGAN
 PRIMARY EXAMINER
 ART UNIT 159B



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
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07/521,618 05/10/90 EGASHIRA

Y Q23105

EXAMINER

MORGAN, K

15M1

SUGHRUE, MION, ZINN, MACPEAK & SEAS
2100 PENNSYLVANIA AVE., N. W.
WASHINGTON, DC 20037

ART UNIT

PAPER NUMBER

1511

DATE MAILED:

05/21/93

Supplemental NOTICE OF ALLOWABILITY

PART I.

1. ☐ This communication is responsive to _____.
2. ☒ All the claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice Of Allowance And Issue Fee Due or other appropriate communication will be sent in due course.
3. ☒ The allowed claims are 1, 3-11 and 18-20.
4. ☒ The drawings filed on 5/10/90 are acceptable.
5. ☒ Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☒ been received. ☐ not been received. ☐ been filed in parent application Serial No. _____, filed on _____.
6. ☐ Note the attached Examiner's Amendment.
7. ☐ Note the attached Examiner Interview Summary Record, PTOL-413.
8. ☐ Note the attached Examiner's Statement of Reasons for Allowance.
9. ☐ Note the attached NOTICE OF REFERENCES CITED, PTO-892.
10. ☐ Note the attached INFORMATION DISCLOSURE CITATION, PTO-1449.

PART II.

A SHORTENED STATUTORY PERIOD FOR RESPONSE to comply with the requirements noted below is set to EXPIRE THREE MONTHS FROM THE "DATE MAILED" indicated on this form. Failure to timely comply will result in the ABANDONMENT of this application. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

1. ☐ Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION, PTO-152, which discloses that the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED.
2. ☐ APPLICANT MUST MAKE THE DRAWING CHANGES INDICATED BELOW IN THE MANNER SET FORTH ON THE REVERSE SIDE OF THIS PAPER.
 - a. ☐ Drawing informalities are indicated on the NOTICE RE PATENT DRAWINGS, PTO-848, attached hereto or to Paper No. _____. CORRECTION IS REQUIRED.
 - b. ☐ The proposed drawing correction filed on _____ has been approved by the examiner. CORRECTION IS REQUIRED.
 - c. ☐ Approved drawing corrections are described by the examiner in the attached EXAMINER'S AMENDMENT. CORRECTION IS REQUIRED.
 - d. ☐ Formal drawings are now REQUIRED.

Any response to this letter should include in the upper right hand corner, the following information from the NOTICE OF ALLOWANCE AND ISSUE FEE DUE: ISSUE BATCH NUMBER, DATE OF THE NOTICE OF ALLOWANCE, AND SERIAL NUMBER.

Attachments:

- Examiner's Amendment
- Examiner Interview Summary Record, PTOL-413
- Reasons for Allowance
- Notice of References Cited, PTO-892
- Information Disclosure Citation, PTO-1449

- Notice of Informal Application, PTO-152
- Notice re Patent Drawings, PTO-848
- Listing of Bonded Draftsmen
- Other

Kriellion S Morgan
KRIELLION S MORGAN
PRIMARY EXAMINER
ART UNIT 159B



**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

Address: Box ISSUE FEE
COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

****CORRECTED COPY****

SUGHRUE, MION, ZINN, MACPEAK & SEAS
2100 PENNSYLVANIA AVE., N. W.
WASHINGTON, DC 20037

**NOTICE OF ALLOWANCE
AND ISSUE FEE DUE**

- ☐ Note attached communication from the Examiner
☐ This notice is issued in view of applicant's communication filed _____

SERIES CODE/SERIAL NO.	FILING DATE	TOTAL CLAIMS	EXAMINER AND GROUP ART UNIT	DATE MAILED
07/521,618	05/10/90	013	MORGAN, K	1511 05/21/93
First Named Applicant	EGASHIRA, YOSHINORI			

TITLE OF INVENTION: **SOLID GOLF BALL**

ATTY'S DOCKET NO.	CLASS-SUBCLASS	BATCH NO.	APPLN. TYPE	SMALL ENTITY	FEE DUE	DATE DUE
1 023105	524-392.000	M11	UTILITY	NO	\$1170.00	08/23/93

THE FEE DUE IS THE AMOUNT IN EFFECT AT THIS TIME. IF THE AMOUNT OF THE ISSUE FEE INCREASES PRIOR TO PAYMENT, APPLICANT WILL BE NOTIFIED OF THE BALANCE OF ISSUE FEE DUE.

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT.

PROSECUTION ON THE MERITS IS CLOSED.

THE ISSUE FEE MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED.

HOW TO RESPOND TO THIS NOTICE:

- I. Review the SMALL ENTITY Status shown above.
If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:
 - A. If the status is changed, pay twice the amount of the FEE DUE shown above and notify the patent and Trademark Office of the change in status, or
 - B. If the Status is the same, pay the FEE DUE shown above.
- II. Part B of this notice should be completed and returned to the Patent and Trademark Office (PTO) with your ISSUE FEE. Even if the ISSUE FEE has already been paid by charge to deposit account, Part B should be completed and returned. If you are charging the ISSUE FEE to your deposit account, Part C of this notice should also be completed and returned.
- III. All communications regarding this application must give series code (or filing date) and serial number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to contrary.

If the SMALL ENTITY is shown as NO:

- A. Pay FEE DUE shown above, or
- B. File verified statement of Small Entity Status before, or with, pay of 1/2 the FEE DUE shown above.

IMPORTANT REMINDER: Patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.



PART B—ISSUE FEE TRANSMITTAL

MAILING INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE. Blocks 2 through 6 should be completed where appropriate. Further correspondence, including the Issue Fee Receipt, the Patent, advances orders and notification of maintenance fees will be mailed to addressee entered in Block 1, unless you direct otherwise, by (a) specifying a new correspondence address in Block below; or (b) providing the PTO with a separate ADDRESS for maintenance fee notifications with the payment of Issue Fee or thereafter. See reverse for Certificate of Mailing.

1. CORRESPONDENCE ADDRESS **CORRECTED COPY** 15M1 SUGHRUE, MION, ZINN, MACPEAK & SEAS 2100 PENNSYLVANIA AVE., N.W. WASHINGTON, DC 20037	2. INVENTOR(S) ADDRESS CHANGE (Complete only if there is a change) INVENTOR'S NAME Street Address City, State and ZIP Code CO-INVENTOR'S NAME Street Address City, State and ZIP Code <input type="checkbox"/> Check if additional changes are on reverse side.
---	--

SERIES CODE/SERIAL NO.	FILED DATE	TOTAL CLAIMS	EXAMINER AND GROUP ART UNIT	DATE MAILED
07/521,618	05/10/90	013	MORGAN, K	1511 05/21/93
First Named Applicant: EGASHIRA YOSHINORI				
TITLE OF INVENTION: SOLID GOLF BALL				

ATTY'S DOCKET NO.	CLASS/SUBCLASS	BATCH NO.	APPLN. TYPE	SMALL ENTITY	FEE DUE	DATE DUE
1 023105	524-392.000	M11	UTILITY	NO	\$1170.00	08/23/93

3. Correspondence address change. (Complete only if there is a change).	4. For printing on the patent front page, list the names of not more than 3 registered patent attorneys or agents OR alternatively, the name of a firm having as a member a registered attorney or agent. If no name is listed, no name will be printed.	Sughrue, Mion, Zinn Macpeak & Seas
---	--	---------------------------------------

DO NOT USE THIS SPACE

120 TL 07/15/93 07521618		1 142 1,170.00 CK
5. ASSIGNMENT DATA TO BE PRINTED ON THE PATENT (print or type)		
(1) NAME OF ASSIGNEE: Bridgestone Corporation		
(2) ADDRESS (CITY & STATE OR COUNTRY): Tokyo, Japan		
(3) STATE OF INCORPORATION, IF ASSIGNEE IS A CORPORATION		
A. This application is NOT assigned. <input type="checkbox"/> Assignment is being previously submitted to the Patent and Trademark Office. <input type="checkbox"/> Assignment is being submitted under separate cover. Assignments should be directed to Box ASSIGNMENTS. PLEASE NOTE: Unless an assignee is identified in Block 5, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the PTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment.		A check for the Issue Fee payment is attached. Please charge any payment deficiency and credit any overpayment to PTOA 19-4880. The COMMISSIONER OF PATENTS AND TRADEMARKS is required to apply the Issue Fee to the applicant identified above. (Date) 7/9/93 Mark Boland, Reg. No 32,197
NOTE: The Issue Fee will not be accepted from anyone other than the applicant, a registered attorney or agent, or the assignee or other party in interest as shown by the records of the Patent and Trademark Office.		

TRANSMIT THIS FORM WITH FEE CERTIFICATE OF MAILING ON REVERSE

BEST COPY

PTO UTILITY GRANT

Patent Number 6,275

The
United
States
of
America



PTO-1584

The Commissioner of Patents
and Trademarks

Has received an application for a patent
for a new and useful invention. The title
and description of the invention are en-
closed. The requirements of law have
been complied with, and it has been de-
termined that a patent in this invention
shall be granted under the law.

Therefore, this

United States Patent

Grants to the person or persons having
title to this patent the right to exclude
others from making, using or selling the
invention throughout the United States
of America for the term of seventeen
years from the date of this patent, sub-
ject to the payment of maintenance fees
as provided by law.

Bence Lehman

Commissioner of Patents and Trademarks

Marcus C. Amey

Attest

07/521618

PATENT APPLICATION SERIAL NO. _____

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE
FEE RECORD SHEET

P 30460 05/15/90 07521618 19-4880 030 101 370.00CH 0-23105

PTO-1556
(5/87)

PTO-1350 (REV. 9-97)

U.S. DEPARTMENT OF COMMERCE-PATENT & TM OFFICE PREPARED BY F-16 DATE 5/18/90

PALM III APPLICATION FILE DATA CODING SHEET

FORMAT NO. 2 Serial No. APPL 07/521618		FILING DATE Month <u>05</u> Day <u>10</u> Year <u>90</u>		SPECIAL HANDLING GROUP ART UNIT <u>3</u> <u>3</u> <u>4</u>		CLASS <u>27</u> <u>3</u>		SHEETS OF DRAWINGS <u>01</u> <u>1</u>		ASGTY <u>Y</u>		TOTAL CLAIMS <u>06</u>		INDEPENDENT CLAIMS <u>01</u> <u>0</u>		SMALL ENTITY? <u>0</u>		FILING FEE RECEIVED <u>370</u>		SECURITY FOREIGN LICENSE <u>Y</u>	
FORMAT NO. 3 <u>01233105</u>		ATTORNEY DOCKET NUMBER (12 spaces) <u>051090</u>		Day's Reg. Nos. APPL. PAPERS <input type="checkbox"/> CODING SHEET <input type="checkbox"/>		Applicant's Name & Address APPL. PAPERS <input type="checkbox"/> CODING SHEET <input type="checkbox"/>		FORMAT NO. 4 <u>01</u> <u>0</u> <u>6</u>		Title of Invention APPL. PAPERS <input type="checkbox"/> CODING SHEET <input type="checkbox"/>		ADDRESS APPL. PAPERS <input type="checkbox"/> CODING SHEET <input type="checkbox"/>		FORMAT NO. 8 & 7 Correspondence <u>01</u> <u>0</u> <u>6</u>		PARENT FILING DATE Month <u>01</u> Day <u>05</u> Year <u>89</u>		PARENT PATENT NUMBER <u>01</u> <u>05</u> <u>89</u>		STATUS CODE <u>01</u> <u>05</u> <u>89</u>	

PARENT APPLICATION SERIAL NUMBER CONTINUITY CODE 0 0 0 0 0 0 0 0 0 0 0 0		PARENT FILING DATE Month <u>01</u> Day <u>05</u> Year <u>89</u>		PARENT PATENT NUMBER <u>01</u> <u>05</u> <u>89</u>	
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COUNTRY CODE <u>JP</u> <u>X</u>		PCT/FOREIGN APPLICATION SERIAL NUMBER <u>1</u> <u>1</u> <u>1</u> <u>8</u> <u>4</u> <u>6</u> <u>0</u>		FILING DATE Month <u>01</u> Day <u>05</u> Year <u>89</u>	
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RECORD	8	0	1
RECORD	8	0	2
RECORD	8	0	3
RECORD	8	0	4
RECORD	8	0	5
RECORD	8	0	6
RECORD	8	0	7
RECORD	8	0	8
RECORD	8	0	9
RECORD	8	1	0

☐ MORE ON SUPPLEMENTAL CODING SHEET

RECORD	9	0	1
RECORD	9	0	2
RECORD	9	0	3
RECORD	9	0	4
RECORD	9	0	5
RECORD	9	0	6
RECORD	9	0	7
RECORD	9	0	8
RECORD	9	0	9
RECORD	9	1	0

☐ FOREIGN PRIORITY CLAIMED? ☒ YES ☐ NO
☐ APPLICATION PAPERS
☐ MORE ON SUPPLEMENTAL CODING SHEET

FORM PTO-875 REV. 1-85	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	SERIAL NO 521618	FILED DATE 5/10/90
PATENT APPLICATION FEE DETERMINATION RECORD		APPLICANT (FIRST NAMED) EGASHIRA, Y, ETAL	

CLAIMS AS FILED - PART I

FOR	NO FILED	NO EXTRA
BASIC FEE		
TOTAL CLAIMS	6	20
INDEP CLAIMS	1	3
MULTIPLE DEPENDENT CLAIMS PRESENT		

* If the difference in Col. 1 is less than 20% enter "0" in Col. 2

SMALL ENTITY

RATE	FEE
	\$ 185
x 6	\$
x 18	\$
60	\$
TOTAL	\$

OTHER THAN A
SMALL ENTITY

RATE	FEE
	\$ 370
x 12	\$
x 36	\$
120	\$
TOTAL	\$ 376

CLAIMS AS AMENDED - PART II

AMENDMENT A	(1)		(2)		(3)	
	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NO PREVIOUSLY PAID FOR		PRESENT EXTRA.	
	TOTAL	MINUS				
	INDEP	MINUS				
FIRST PRESENTATION OF MULTIPLE DEP CLAIM						

SMALL ENTITY

RATE	ADDIT FEE
x 6	\$
x 18	\$
60	\$
TOTAL ADDIT. FEE	\$

OTHER THAN A
SMALL ENTITY

RATE	ADDIT FEE
x 12	\$
x 36	\$
120	\$
TOTAL	\$

AMENDMENT B	(1)		(2)		(3)	
	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NO PREVIOUSLY PAID FOR		PRESENT EXTRA	
	TOTAL	MINUS				
	INDEP	MINUS				
FIRST PRESENTATION OF MULTIPLE DEP CLAIM						

SMALL ENTITY

RATE	ADDIT FEE
x 6	\$
x 18	\$
60	\$
TOTAL ADDIT. FEE	\$

OTHER THAN A
SMALL ENTITY

RATE	ADDIT FEE
x 12	\$
x 36	\$
120	\$
TOTAL	\$

AMENDMENT C	(1)		(2)		(3)	
	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NO PREVIOUSLY PAID FOR		PRESENT EXTRA	
	TOTAL	MINUS				
	INDEP	MINUS				
FIRST PRESENTATION OF MULTIPLE DEP CLAIM						

SMALL ENTITY

RATE	ADDIT FEE
x 6	\$
x 18	\$
60	\$
TOTAL ADDIT. FEE	\$

OTHER THAN A
SMALL ENTITY

RATE	ADDIT FEE
x 12	\$
x 18	\$
60	\$
TOTAL	\$

* If the entry in Col. 1 is less than the entry in Col. 3, enter "0" in Col. 3

* If the entry in Col. 1 is less than the entry in Col. 3, enter "0" in Col. 3

PATENT APPLICATION FEE DETERMINATION RECORD For Fees Effective Nov. 5, 1990						Application or Docket Number	
CLAIMS AS FILED - PART I						SMALL ENTITY OR OTHER THAN SMALL ENTITY	
(Column 1)		(Column 2)		(Column 3)		(Column 4)	
FOR	NUMBER FILED	NUMBER EXTRA	RATE	FEE	OR	RATE	FEE
BASIC FEE	minue 20 = *		x \$10 =	\$ 315.00	OR	x \$20 =	\$ 630.00
TOTAL CLAIMS	minue 3 = *		x 30 =		OR	x 60 =	
INDEPENDENT CLAIMS	MULTIPLE DEPENDENT CLAIM PRESENT		+ 100 =		OR	+ 200 =	
* If the difference in column 1 is less than zero, enter "0" in column 2			TOTAL		OR	TOTAL	
CLAIMS AS AMENDED - PART II						SMALL ENTITY OR OTHER THAN SMALL ENTITY	
(Column 1)		(Column 2)		(Column 3)		(Column 4)	
AMENDMENT A	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE	ADDITIONAL FEE	OR	RATE
Total	* 18	Minus ** 20	= -	x \$10 =	OR	x \$20 =	OR
Independent	* 1	Minus *** 3	= -	x 30 =	OR	x 60 =	OR
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM			+ 100 =	OR	+ 200 =		
TOTAL			ADDIT. FEE		OR	TOTAL	ADDIT. FEE
(Column 1)		(Column 2)		(Column 3)		(Column 4)	
AMENDMENT B	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE	ADDITIONAL FEE	OR	RATE
Total	*	Minus **	=	x \$10 =	OR	x \$20 =	OR
Independent	*	Minus ***	=	x 30 =	OR	x 60 =	OR
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM			+ 100 =	OR	+ 200 =		
TOTAL			ADDIT. FEE		OR	TOTAL	ADDIT. FEE
(Column 1)		(Column 2)		(Column 3)		(Column 4)	
AMENDMENT C	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE	ADDITIONAL FEE	OR	RATE
Total	*	Minus **	=	x \$10 =	OR	x \$20 =	OR
Independent	*	Minus ***	=	x 30 =	OR	x 60 =	OR
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM			+ 100 =	OR	+ 200 =		
TOTAL			ADDIT. FEE		OR	TOTAL	ADDIT. FEE
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3. ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.							

PATENT NUMBER

ORIGINAL CLASSIFICATION

CLASS

SUBCLASS

524

392

APPLICATION SERIAL NUMBER

07/521,618

CROSS REFERENCE(S)

CLASS

SUBCLASS
(ONE SUBCLASS PER BLOCK)

524

289

382

908

APPLICANT'S NAME (PLEASE PRINT)

Eqashira et al.

273

218

IF REISSUE, ORIGINAL PATENT NUMBER

INTERNATIONAL CLASSIFICATION (INT. CL.)

C08K

5/09

C08K

5/36

A63B

37/90

GROUP
ART UNIT

1511

ASSISTANT EXAMINER (PLEASE STAMP OR PRINT FULL NAME)

PRIMARY EXAMINER (PLEASE STAMP OR PRINT FULL NAME)

Kie Hion S. Morgan

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ISSUE CLASSIFICATION SLIP

Claim	Filed	Original	Date
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SYMBOLS

. Requested
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 (Through nominal) Cancelled
 + Withdrawn
 N Non-elected
 . Interference
 A Appeal
 O Objected

INDEX OF CLAIMS

Amended

Claim	Final	Original	Date
1			
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Claim	Final	Original	Date
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SYMBOLS

✓ Allowed
 m Allowed
 - (Through numeral) Crossed
 + Restituted
 N Non-elected
 S Withdrawn
 A Appeal
 O Objected

SEARCHED			
Class	Sub.	Date	Exmr.
524	908	6-27-91	G. Lee
	289	10-18-91	G. Lee
	382	11	11
plus			
524	392	7/92	K.A.
Alone	to Date	9/92	K.M.

79

SEARCH NOTES		
Name	Date	Expir.

INTERFERENCE SEARCHED			
Class	Sub.	Date	Exmr.
524	289 382 392 908	7/93	T.M.

EXHIBIT 17

LEXSEE 2006 U.S. DIST LEXIS 81687



Cited

As of: Apr 13, 2007

**AUTO METER PRODUCTS, INC., Plaintiff, v. MAXIMA TECHNOLOGIES &
SYSTEMS, LLC, Defendant.**

No. 05 C 4587

**UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF
ILLINOIS, EASTERN DIVISION**

2006 U.S. Dist. LEXIS 81687

November 6, 2006, Decided

COUNSEL: [*1] For Auto Meter Products, Inc., an Illinois Corporation, Plaintiff: Philip T. Petti, Rudy I. Kratz, Fitch, Even, Tabin & Flannery, Chicago, IL.; Charles W. Saber, Dickstein Shapiro LLP, Washington, DC.; Merritt R. Blakeslee, deKieffer & Horgan, Washington, DC, US.; Steven M. War, Dickstein Shapiro L.L.P., Washington, DC, US.

For Maxima Technologies & Systems, LLC, a Delaware Limited Liability Company, Defendant: George C. Werner, Kendra D. McGuire, Barley Snyder LLC, Lancaster, PA, US.; Matthew Austin Griffin, Robert M. Newbury, Robert W. Sacoff, Sanjiv D. Sarwate, Pattishall, McAuliffe, Newbury, Hillard & Geraldson, Chicago, IL.; Salvatore Anastasi, Salvatore Anastasi, Attorney at Law, Berwyn, PA, US.

For Auto Meter Products, Inc., an Illinois Corporation, Counter Defendant: Charles W. Saber, Dickstein Shapiro LLP, Washington, DC.; Merritt R. Blakeslee, deKieffer & Horgan, Washington, DC, US.; Steven M. War, Dickstein Shapiro L.L.P., Washington, DC, US.

JUDGES: NAN R. NOLAN, United States Magistrate Judge.

OPINION BY: NAN R. NOLAN

OPINION:

MEMORANDUM OPINION AND ORDER

Plaintiff Auto Meter Products, Inc. has filed suit against Defendant Maxima Technologies & Systems,

LLC alleging [*2] trademark infringement and unfair competition under 15 U.S.C. §§ 1114 and 1125, and under Illinois common law. Currently before the court is Auto Meter's motion to compel complete answers to Interrogatory Nos. 12, 13, and 15. For the reasons set forth below, the motion is granted in part and denied in part.

BACKGROUND

Auto Meter develops, manufactures, and sells automotive measuring instruments, such as tachometers, speedometers, and gauges for measuring oil pressure, oil temperature, water temperature, vacuum, fuel pressure, and fuel levels. In connection with that business, Auto Meter owns the Super Bezel Trademark, Principal Registration No. 2,883,435 (the '435 Registration), and the "ULTRA-LITE" trademark, Principal Registration No. 1,967,655 (the '655 Registration). It also owns the trade dress for the "Monster Tachometer."

On May 16, 2003, Auto Meter filed a complaint with the International Trade Commission ("ITC") seeking to stop 19 respondents from importing and selling imitation tachometers and gauges that infringe Auto Meter trademarks. Maxima was not a respondent in that action, but was involved as a third party [*3] and produced documents to the named respondents. In this lawsuit against Maxima, Auto Meter alleges that Maxima's "Stewart Warner Performance" series of tachometers, gauges, and speedometers infringes the '435 and '655 Registrations, and the Monster Tachometer Trade Dress.

Prior to the close of fact discovery, Auto Meter served Maxima with several contention interrogatories, including the following:

Interrogatory No. 12: State fully the basis, including all supporting facts, documents, exhibits, testimony and/or expert opinions, for Maxima's allegations in paragraphs 1-5 of its affirmative defenses that Auto Meter's Super Bezel Trademark, Associated Trade Dress, and Monster Tachometer Trade Dress are functional and that Auto Meter is not entitled to any trade dress protection; that Auto Meter's Super Bezel Trademark, Associated Trade Dress, and Monster Tachometer Trade Dress are not inherently distinctive and have not acquired secondary meaning; that the relief requested in Auto Meter's Complaint is barred by laches and that Auto Meter unreasonably delayed in filing suit; and that Maxima's use of the term "Ultra-Shift Light" constitutes a fair use.

Interrogatory [*4] No. 13: State fully the basis, including all supporting facts, documents, exhibits, testimony and/or expert opinions, for Maxima's allegation that its accused products do not infringe Auto Meter's trade dress and trademark rights asserted in this action.

Interrogatory No. 15: State fully the basis, including all supporting facts, documents, exhibits, testimony, and/or expert opinions, for Maxima's counterclaim.

Maxima initially responded to these interrogatories on February 7, 2006, directing Auto Meter to its amended answer and stating that "other facts may be disclosed in the course of discovery." (Ex. 4 to Pl. Mem., at 9-11.) On June 30, 2006, Maxima submitted supplemental responses stating that "[d]iscovery is on-going and Maxima will supplement this response as discovery progresses." With respect to Interrogatory No. 15, Maxima further directed Auto Meter to "the documents produced in response to Auto Meter's document requests." (Ex. 5 to Pl. Mem., at 9-10.)

Maxima supplemented its discovery responses a second time on September 6, 2006, the original deadline for fact discovery. n1 Auto Meter found these responses inadequate and ultimately filed a motion to [*5] compel on September 29, 2006. On October 5, 2006, Auto Meter conducted a continued deposition of Maxima's President and CEO Oddie Leopando, who had been designated as the company's *Rule 30(b)(6)* witness and who was origi-

nally deposed on August 17, 2006. During the continued deposition, Auto Meter questioned Mr. Leopando about the September 6, 2006 supplemental responses. On October 17, 2006, Maxima supplemented its responses a third time, adding still new contentions in support of its defenses and counterclaim. (Ex. B to Def. Resp.) Auto Meter insists that Maxima should be barred from relying on "any contentions, factual bases, and documents not fully disclosed in its October 17 supplemental response, or in its August 17 and October 5 *Rule 30(b)(6)* depositions." Auto Meter also seeks to recover attorneys' fees and costs incurred in pursuing this motion to compel.

n1 On September 11, 2006, the court agreed to extend fact discovery to October 6, 2006. (Minute Order of 9/11/06, Doc. 51.)

DISCUSSION

Contention [*6] interrogatories, such as those at issue here, basically "require the answering party to commit to a position and give factual specifics supporting its claims." *Ziemack v. Centel Corp.*, 1995 U.S. Dist. LEXIS 18192 at 5, No. 92 C 3551, 1995 WL 729295, at *2 (N.D. Ill. Dec. 7, 1995). "When one party poses contention interrogatories after considerable discovery, and the opposing party refuses to answer the interrogatories, courts routinely compel the resisting party to answer the interrogatories." *Calobrace v. American Nat'l Can Co.*, No. 93 C 999, 1995 U.S. Dist. LEXIS 1371, at *3 (N.D. Ill. Feb. 3, 1995) (citing *Rusty Jones, Inc. v. Beatrice Co.*, 1990 U.S. Dist. LEXIS 12116 at 2-3, No. 89 C 7381, 1990 WL 139145, at *2 (N.D. Ill. Sept. 14, 1990)).

A. Interrogatory Nos. 12 and 15

Interrogatory No. 12 seeks information regarding Maxima's affirmative defenses. Interrogatory No. 15 requests the facts and documents supporting Maxima's counterclaim, which seeks cancellation of Auto Meter's Super Bezel Trademark based on Maxima's affirmative defenses. Auto Meter argues that Maxima has engaged in a pattern of providing deficient answers to these interrogatories, and then serially supplementing those [*7] answers with new allegations and citations. For example, at his October 5, 2006 30(b)(6) deposition, Mr. Leopando purported to disclose all of the factual bases and evidence for Maxima's functionality defense. (Leopando Dep., at 517, 518-91.) In the October 17, 2006 supplemental response, however, Maxima newly asserted that it is additionally relying on "documents addressing functionality from the International Trade Commission proceeding." (Ex. B to Def. Resp., at 3.) According to Auto Meter, the ITC record consists of more than 75,000 pages, but Maxima has not identified

"a single one of the documents from that mountain of materials that it expects to rely upon for its functionality allegations." (Pl. Reply, at 6.)

Similarly, with respect to Maxima's defense that Auto Meter's trademarks/trade dress lack secondary meaning, Maxima produced at the October 5 deposition three old gauges made by the now defunct Sun Electric Company in the 1960s and 1970s. (Pl. Reply, at 6 n.7.) Mr. Leopando then testified that these were the only historical Sun products upon which Maxima intended to rely. (Ex. E to Def. Resp., at 598-609, 615.) In the October 17, 2006 supplemental response, however, Maxima [*8] referenced some 36 additional gauges listed in the expert report of a Mr. Behrens from the ITC case. (Ex. B. to Def. Resp., at 5; Pl. Reply, at 6.) Maxima also stated for the first time that "evidence concerning third-party gauges and tachometers can be found in the production of documents and gauges which Auto Meter inspected on September 26, 2006." (Ex. B to Def. Resp., at 5.) This production apparently comprises approximately 36 bankers boxes of old gauges, automotive magazines, brochures, and documents. Auto Meter claims that Maxima has not identified which materials from those boxes support its defenses or counterclaim. Auto Meter also objects that Maxima "continues to withhold its contentions . . . concerning the facts necessary to establish the relevance of those old gauges (or the other gauges it relies upon) to the use of 'secondary meaning,' e.g., the channels of trade into which they are sold, their market position and market segments, features relevant to consumers, their sales and market share, etc." (Pl. Reply, at 7.)

In addition, Maxima apparently raised an entirely new contention supporting its secondary meaning defense in the October 17 supplemental response; [*9] namely, that Auto Meter's small percentage of sales to private label and original equipment customers ("OEM") eliminate the secondary meaning of the Super Bezel trademark. (Ex. B to Def. Resp., at 5.) Maxima claims that unspecified "licensed third-parties" to the Super Bezel mark and unspecified "documents produced by Auto Meter concerning OEM and private label sales and customers, artwork for OEM and private label dial faces" support this new assertion.

As for Maxima's laches defense, the company still has not produced documents Mr. Leopando mentioned at his deposition that purportedly show that Auto Meter received certain "strategic information" about Maxima's products during a Maxima plant tour. (Pl. Reply, at 8-9.) Nor has Maxima identified the individuals involved in that plant tour, or the Auto Meter personnel who allegedly spoke about the Maxima products during a trade show. (*Id.*)

At this late stage of the case, the court agrees that it is time for Maxima to fully and completely answer Auto Meter's interrogatories. Fact discovery is at an end, yet Maxima is still referencing new documents and materials supporting its defenses and counterclaim. As noted, contention interrogatories [*10] "require the answering party to commit to a position and give factual specifics supporting its claims." *Thomas & Betts Corp. v. Panduit Corp.*, 1996 U.S. Dist. LEXIS 4494 at 7, No. 93 C 4017, 1996 WL 169389, at *2 (N.D. Ill. Apr. 9, 1996). The Federal Rules, moreover, "are designed to promote liberal discovery in an effort to narrow the issues for trial and prevent unfair surprise." *Wright v. Touhy*, 2003 U.S. Dist. LEXIS 19167, No. 97 C 742, 2003 WL 22439864, at *4 (N.D. Ill. Oct. 28, 2003).

Maxima is ordered to identify (1) the specific ITC documents that support its functionality defense; (2) the specific gauges and documents from the September 26, 2006 inspection and the Behrens report that it intends to rely upon for its secondary meaning defense; (3) the facts supporting the relevance of these third-party gauges; (4) the documents Mr. Leopando mentioned at his deposition, and any other documents that purportedly show that (a) Auto Meter received certain "strategic information" about Maxima's products during a Maxima plant tour, and (b) Maxima suffered prejudice from Auto Meter's delay in pursuing its claims; (5) the Auto Meter personnel who participated in the Maxima plant tour and/or attended the trade [*11] show, and the specific statements they made which support Maxima's laches defense; and (6) the specific documents and data supporting Maxima's assertion that Auto Meter's small percentage of sales to private label and original equipment customers eliminate the secondary meaning of the Super Bezel trademark. Any facts or documents not so disclosed cannot be relied upon in this case.

Contrary to Maxima's assertion, none of this information constitutes protected work product. (Def. Resp., at 8.) Auto Meter is requesting the identification of facts, documents, individuals, statements, and products supporting Maxima's defenses and counterclaim, and not Maxima's legal theories or analyses. Responses to these requests will not, as Maxima suggests, provide Auto Meter with "a 'playbook' of how Maxima will present its defenses and counterclaim at trial." (*Id.* at 10-11.) See, e.g., *Fridkin v. Minnesota Mut. Life Ins. Co.*, 1998 U.S. Dist. LEXIS 1017 at 13, No. 97 C 332, 1998 WL 42322, at *4 (N.D. Ill. Jan. 29, 1998) (work-product privilege did not protect defendant from producing documents, witnesses, and industry/company policy supporting its defense); *Mead Corp. v. Riverwood Natural Resources, Corp.*, 145 F.R.D. 512, 517-18 (D. Minn. 1992) [*12] (rejecting alleged infringer's work-product immunity defense to answering interrogatories that sought "objec-

tive facts upon which defenses interposed were based and the identity of persons with knowledge of those facts.") Auto Meter's motion to compel the above information is granted.

B. Interrogatory No. 13

Interrogatory No. 13 seeks information supporting Maxima's defense of non-infringement. In the October 17, 2006 supplemental response, Maxima states that it is relying on "the overall different look and impression of its products as compared to Auto Meter's; the prominent display of distinguishing brand names and the use of distinguishing packaging; [and] that there have been no instances of confusion." (Ex. B to Def. Resp., at 9.) Maxima refuses, however, to identify (1) how the Maxima products create a different look and impression, including identification of distinguishing features; (2) the distinguishing brand names, how they are displayed, and how their display supports Maxima's contention of non-infringement; and (3) the distinguishing packaging and how its use supports Maxima's contention of non-infringement. (Def. Resp., at 9.) Maxima argues that engaging [*13] in a detailed comparison of the parties' products and packages "would require Maxima to reveal its legal strategy and positions with regard to the entire case." (*Id.*) The court disagrees.

As with Interrogatory No. 12, Auto Meter seeks the facts upon which Maxima's non-infringement defense is based, and not any legal theory or analysis. Indeed, Maxima cannot prevail on its non-infringement defense in the absence of specific facts. *See, e.g., Homefront, Inc. v. Cashmere Crafts, Inc.*, 2005 U.S. Dist. LEXIS 40401 at 21, No. C 05-0597 PJH, 2005 WL 3369988, at *8 (N.D. Cal. Dec. 12, 2005) ("[S]imply to assert that the accused products did not actually infringe Homefront's copyrights is far from providing facts that support a de-

fense of non-infringement.") The motion to compel is granted with respect to Interrogatory No. 13.

C. Expert Opinions

In addition to the information discussed above, Interrogatory Nos. 12, 13, and 15 all seek expert opinions supporting Maxima's defenses and counterclaim. The court agrees with Maxima that these disclosures are properly addressed pursuant to the expert discovery schedule set by this court on September 11, 2006. (Minute Order of 9/11/06, Doc. 51.) This portion of [*14] Auto Meter's motion to compel is denied.

D. Sanctions

In light of the above ruling, the court finds that Auto Meter has not been harmed by Maxima's delay in responding to the contention interrogatories and declines to award sanctions. *Commonwealth Ins. Co. v. Titan Tire Corp.*, 398 F.3d 879, 888 (7th Cir. 2004) ("A district court enjoys broad discretion in declining to impose discovery sanctions and exclude evidence."); *Najieb v. Chrysler-Plymouth*, 2002 U.S. Dist. LEXIS 24927 at 12 n.10, No. 01 C 8295, 2002 WL 31906466, at *3 n.10 (N.D. Ill. Dec. 31, 2002) ("Th[e] Court has broad discretion to determine whether to issue discovery sanctions.")

CONCLUSION

For the reasons stated above, Auto Meter's motion to compel [Doc. 54] is granted in part and denied in part. Maxima is ordered to provide Auto Meter with further answers to Interrogatory Nos. 12, 13, and 15 consistent with this opinion by November 30, 2006.

Dated: November 6, 2006

NAN R. NOLAN

United States Magistrate Judge